# **Biodiversity**

The Biodiversity Impact Calculator uses the Defra metric to calculate the biodiversity units of a site both before and after any proposed development; this reveals if the development is likely to cause no net loss, net loss or net gain to biodiversity.

It is a transparent metric used to quantify the value of biodiversity at any site and can form an evidence base on required mitigation and on-site compensation of a development, the amount of residual biodiversity impact and, if necessary, the amount of off-site compensation required through a 'biodiversity offsetting' scheme.

These principles are in line with the Natural Environment White Paper and are set out in the National Planning Policy Framework:

"The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

"If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused."

# **The Calculation Assumptions**

The metric scores the value of the site before and after development. For the site at Watton Road which is pre-planning and does not have detailed External Works and Landscaping proposals the tool is used to assess the broad parameters of the proposal which amounts to a residential development of aprx 6 hectares on what is previously arable fields. The site proposes an additional area of arable fields to be planted as broadleaved woodland. For the purposes of this calculation areas of green open space, planting and habitats within the residential site have been excluded to focus the assessment on the value of the new Woodland proposed.





Figure 1. site plan showing residential and woodland areas.



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## **BIODIVERSITY IMPACT CALCULATION**

Land Opposite Hingham Sports Centre, Hingham, Norfolk

February 2021



Registered Office 60 Norwich Road Stoke Holy Cross

Norwich, NR14 BNX

### Norwich Office

Office 14, Ber Street Central 125 Ber Street Norwich, NRT 3EY



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Land Opposite Hingham Sports Centre Headline Results

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	Habitat units	40.80
On-site baseline	Hedgerow units	3.28
	River units	0.00
On site past intervention	Habitat units	66.45
On-site post-intervention	Hedgerow units	5.36
(Including habitat retention, creation, enhancement & succession)	River units	0.00
	Habitat units	0.00
Off-site baseline	Hedgerow units	0.00
	River units	0.00
Officite pact intervention	Habitat units	0.00
On-site post-intervention	Hedgerow units	0.00
(Including habitat retention, creation, enhancement & succession)	River units	0.00
Total net unit change	Habitat units	25.65
i otal net unit change	Hedgerow units	2.08
(including all on-site & off-site habitat retention/creation)	River units	0.00
Total net % change	Habitat units	62.87%
Total het 70 change	Hedgerow units	63.40%
(including all on-site & off-site habitat creation + retained habitats)	River units	0.00%

Figure 2. Calculation Headline Results

## Conclusion

The Biodiversity calculator shows a net gain biodiversity increase of 63% with delivery of this scheme. In practice this is likely to be even higher when gardens, open space and other green features within the residential site are accounted for.



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# Policy References

- GNLP Policy 3. Development proposals will be required to conserve and enhance the natural environment (including valued landscapes, biodiversity including priority habitats, networks and species, ancient trees and woodlands, geodiversity, high quality agricultural land and soils)
- GNLP Policy 3. In addition, development will deliver net biodiversity gain through the provision of on-site or off-site natural features, creating new or enhancing existing green infrastructure networks that have regard to and help to achieve the local green infrastructure strategies. It will need to be demonstrated that the gain to biodiversity is a significant enhancement (at least a 10% gain) on the existing situation.
- GNLP Comment 210

Reflecting the Government's 25 Year Environment Plan, the NPPF places great weight on protecting and enhancing Greater Norwich's rich natural environment. It seeks to ensure that development not only avoids harm to natural environmental assets, but also encourages a local plan policy approach which actively protects, promotes and enhances biodiversity, so that development results in biodiversity net gain.

NPPF 8. Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):
 c) an environmental objective – to contribute to protecting and enhancing our natural, built

c) an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity

• NPPF 70. Planning policies and decisions should contribute to and enhance the natural and local environment by:

*d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;* 

• NPPF 174. To protect and enhance biodiversity and geodiversity, plans should:

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity



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THE RESULTS

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Total net % change	Total net unit change         Hobitot units           (including all on-site & off-site habitat retention/creation)         River units	Off-site post-intervention Hobitat units Including habitat retention, creation, enhancement & succession) River units	Off-site baseline Habitat units River units	On-site post-intervention Habitat units Including habitat retention, creation, enhancement & succession) River units	On-site baseline Habitat units River units
62.87% 63.40%	25.65 2.08 0.00	0.00	0.00	66.45 5.36 0.00	40.80 3.28 0.00

## **Summary Figures**

Not project big diversity conten	Habitat units	25.65
Net project bloalversity units	Hedgerow units	2.08
(including all on-site & off-site habitat retention/creation)	River units	0.00
Tatal and is at his alternative 0/ alternative	Habitat units	62.87%
Total project blodiversity % change	Hedgerow units	63,40%

### On-site habitat retention and enhancement

	Habitats	Hedgerows	Rivers
Total site area / length	10.20	0.66	0.00
Total site units	40.80	3.28	0.00
Area / length retained	0.00	0.61	0.00
Units Retained	0.00	3.08	0.00
Area / length enhanced	0.00	0.00	0.00
Baseline units enhanced	0.00	0.00	0.00
Area / length succession	4.00		
Units succession	16.00		
Area / length lost	6.20	0.05	0.00
Units lost	24.80	0.20	0.00





	Basi	eline	Post develo	opment on site	Onsite	Change
Habitat group	Existing area	Existing value	Proposed area	Proposed value	Area change	Onsite Unit change
Cropland	0.0	0.0	0.0	0.0	0.0	0.0
Grassland	10.2	24.8	-10.2	-24.8	-20.4	-49.6
Heathland and shrub	0.0	0.0	0.0	0.0	0.0	0.0
Rivers and lakes	0.0	0.0	0.0	0.0	0.0	0.0
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.0	0.0	0.0	0.0
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.0	0.0	4.0	66.4	4.0	66.4
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0
Coastal lagoons	0.0	0.0	0.0	0.0	0.0	0.0

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Overall C Area change 0.0 -20.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Unit change
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	Bas	eline	Post develo	pment Off-site	Off-sit	e Change
Habitat group	Existing area	Off-site Existing value	Proposed area	Off site Proposed value	Area change	Offsite Unit change
Cropland	0.0	0.0	0.0	0.0	0.0	0.0
Grassland	0.0	0.0	0.0	0.0	0.0	0.0
Heathland and shrub	0.0	0.0	0.0	0.0	0.0	0.0
Rivers and lakes	0.0	0.0	0.0	0.0	0.0	0.0
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.0	0.0	0.0	0.0
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.0	0.0	0.0	0.0	0.0	0.0
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0
Coastal Jagoons	0.0	0.0	0.0	0.0	0.0	0.0

Combined	Base	eline	Combined Po	ost development	Combine	d change
Habitat group	Existing area	Existing value	Proposed area	Proposed value	Proposed area	Proposed value
Cropland	0.0	0.0	0.0	0.0	0.0	0.0
Grassland	10.2	24.8	-10.2	-24.8	-20.4	-49.6
Heathland and shrub	0.0	0.0	0.0	0.0	0.0	0.0
Rivers and lakes	0.0	0.0	0.0	0.0	0.0	0.0
Sparsely vegetated land	0.0	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.0	0.0	0.0	0.0
Wetland	0.0	0.0	0.0	0.0	0.0	0.0
Woodland and forest	0.0	0.0	4.0	66.4	4.0	66.4
Intertidal sediment	0.0	0.0	0.0	0.0	0.0	0.0
Coastal saltmarsh	0.0	0.0	0.0	0.0	0.0	0.0
Rocky shore	0.0	0.0	0.0	0.0	0.0	0.0
Coastal Jagoons	0.0	0.0	0.0	0.0	0.0	0.0







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2	H2	Native Hedgerow	with trees - Associated with bank or ditch	0.2	Medium	4	Moderate	2	Medium	Moderately connected habitat	11	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	1.76
3	H3	N	lative Hedgerow with trees	0.16	Low	2	Poor	H	Low	Unconnected habitat	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.32
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3-2 Site Hedge Creation

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